

SECTION: SUBCUT SOIL CORRECTION

1.0 SUBGRADE SOIL CORRECTION

A. <u>GENERAL</u>

1. ENSURE FOUNDATION SITE IS EXCAVATED, BACKFILLED AND GRADED IN ACCORDANCE WITH THIS DRAWING AND DRAWINGS S-01 AND S-02.

2. SUBCUT AND REPLACE WITH ENGINEERED FILL OR LEAN CONCRETE MIX AT TURBINE SITES

NOTED IN TABLE 1. 3. THE MAXIMUM AND MINIMUM INDEX DENSITIES OF SOILS TO BE USED AS ENGINEERED FILLS

SHALL BE MEASURED ACCORDING TO ASTM D4253 AND D4254 OR A STANDARD PROCTOR

DENSITY TO ASTM D698 PRIOR TO THE MATERIALS BEING PLACED.

B. SUBMITTALS

1. ALL SUBMITTALS SHALL BE MADE TO THE OWNER. SUBMITTALS WILL BE FORWARDED BY THE OWNER TO THE ENGINEER OF RECORD.

2. SUBMIT GRAIN SIZE ANALYSIS, NATURAL MOISTURE CONTENT, AND MAXIMUM AND MINIMUM INDEX DENSITY TEST RESULTS FOR SOILS TO BE USED AS ENGINEERED FILL.

C. PRODUCTS

1. ENGINEERED FILL: A WELL GRADED GRANULAR SOIL CONSISTING OF GRAVEL, SAND OR CRUSHED STONE MEETING THE REQUIREMENTS OF NDDOT CLASS 13 HAVING A MAXIMUM PARTICLE SIZE OF 13" AND LESS THAN 12% PASSING THE NO. 200 SIEVE WITH THE ADDITIONAL REQUIREMENT THAT A MINIMUM OF 70% PASSES THE 3/4"SIEVE.

D. EXECUTION

. WHERE NOTED IN TABLE 1, PERFORM SUBGRADE CORRECTION BY SUBCUTTING DEFICIENT SOILS AND REPLACING WITH COMPACTED ENGINEERED FILL.

2. FOR EACH TURBINE SITE IDENTIFIED, SUBCUT TO THE DEPTH NOTED IN TABLE 1 AND LIMITS SHOWN IN SECTION 1. HAVE THE PROJECT GEOTECHNICAL ENGINEER VERIFY THE DEPTH OF SUBCUT AT THE TIME OF EXCAVATION AND PREPARE A REPORT INDICATING THE APPROVED DEPTH OF SUBCUT.

3. CONTROL SURFACE WATER OR GROUNDWATER FLOWS INTO THE EXCAVATION USING MEANS DETERMINED BY THE CONTRACTOR. IF SUCH MEANS ARE EMPLOYED, RECORD THE MEANS UNDERTAKEN, SOURCE OF WATER (GROUND OR SURFACE), AND VOLUME OF WATER CONTROLLED. SUBMIT A DEWATERING RECORD TO THE FOUNDATION ENGINEER.

4. ENGINEERED FILL PLACEMENT AND COMPACTION: PLACE AND COMPACT ENGINEERED FILL TO THE LIMITS, DEPTH AND RELATIVE DENSITY OR STANDARD PROCTOR DENSITY INDICATED IN SECTION 1. PLACE AN INITIAL LIFT OF ENGINEERED FILL IMMEDIATELY AFTER COMPLETION OF THE EXCAVATION AND APPROVAL BY THE GEOTECHNICAL ENGINEER. PLACE ENGINEERED FILL IN LOOSE LIFTS OF 9 INCHES OR LESS TO ACHIEVE THE SPECIFIED DENSITY.

E. TESTING AND INSPECTION

1. FOR EVERY 1000 CUBIC YARDS OF PLACED ENGINEERED FILL, OWNER REPRESENTATIVE WILL OBTAIN SAMPLES OF ENGINEERED FILL MATERIALS AND PERFORM GRAIN SIZE ANALYSIS, MOISTURE CONTENT, AND RELATIVE DENSITY TESTS.

2. FOR ENGINEERED FILL OWNER REPRESENTATIVE WILL CONDUCT TWO DENSITY TESTS PER LIFT INDICATING TEST LOCATION, DRY DENSITY AND MOISTURE CONTENT. IN THE EVENT THAT THE SPECIFIED DENSITY REQUIREMENT IS NOT ACHIEVED, RECOMPACT AND RETEST THE ENGINEERED

3. OWNER'S GEOTECHNICAL ENGINEER WILL PERFORM A SUBGRADE INSPECTION AT EACH FOUNDATION AND PROVIDE A SUBGRADE INSPECTION REPORT.

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BISON 3 WIND PROJECT MORTON & OLIVER COUNTIES, NORTH DAKOTA

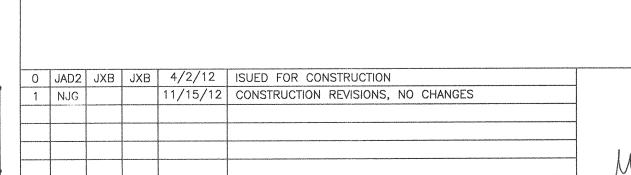
34/30-1006 CLIENT PROJECT No.

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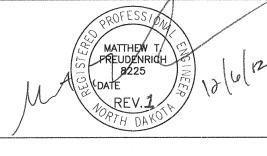
SPREAD FOOTING FOUNDATION ENGINEERED FILL SECTION AND SPECIFICATIONS

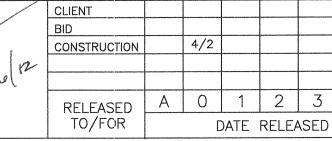
S - 03



NO. BY CHK. APP. DATE

REVISION DESCRIPTION







A WIND ENERGY INITIATIVE OF MINNESOTA POWER IN NORTH DAKOTA